



National Park Service
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Apostle Islands News Release

Release date: **Immediate**

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Date: **January 13, 2012**

BAYFIELD STUDENTS WIN TOP AWARDS FOR APOSTLE ISLANDS RESEARCH

Two students from Bayfield High School earned top awards at the Western Wisconsin and Upper Michigan Junior Science and Humanities Symposium held January 9 at the Eagle Bluff Environmental Learning Center in Lanesboro, Minnesota. First place went to senior Ali Gephart with her study "The relationship between current and seiche in the North Channel of the Apostle Islands". (A seiche is a standing wave that oscillates in a lake as a result of seismic or atmospheric disturbances creating huge fluctuations of water levels in just moments.) Ms. Gephart compared current measurements from an acoustic doppler current profiler placed between Basswood Island and Madeline Island (by the Large Lakes Laboratory at the University of Minnesota - Duluth) with seiche measurements she recorded in the Bayfield harbor. Her study may help facilitate understanding of nutrient and sediment flow around the islands. Second place went to senior Sophie Howk with her study on "The relationship between stable isotope ratios of carbon and nitrogen and contaminants in Apostle Islands' bald eagles". Ms.

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Howk worked with Bill Route from the National Park Service's Great Lakes Inventory and Monitoring Network office in Ashland, Wisconsin. She took portions of eagle blood samples he had collected from 2006 to 2011 and had them analyzed to determine the stable isotope ratios of carbon and nitrogen in the blood. This may be a way of helping to determine the source of contaminants in the eagles.

Bayfield science teacher Rick Erickson worked with the students to facilitate their independent research and participation in the competition. His efforts are part of the Apostle Islands Experiential Learning Program that is supported by a Park Stewards grant from the National Park Foundation. This innovative project is developing new curricula and experiential learning opportunities for students at the Bayfield School. The goal of the project is to give high school teachers and students opportunities to build deeper connections with and a sense of stewardship for the Apostle Islands National Lakeshore through personal engagement and service learning projects.

Ms. Gephart and Ms. Howk both earned college scholarship money and the opportunity to go to Bethesda, Maryland to present their findings at the National Junior Science and Humanities Symposium in early May. This competition is sponsored by the U. S. Army, Navy, and Air Force.

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Bayfield High School students Ali Gephart (left) and Sophie Howk hold the certificates they were awarded for finishing first and second in the Western Wisconsin and Upper Michigan Junior Science and Humanities Symposium. The symposium; sponsored by the U. S. Army, Navy and Air Force; was held on January 9, 2012.